

## Correspondence

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**Chen–Fu Hsu<sup>1)</sup>, Yun Hsiao<sup>1)</sup>, Yun Li<sup>2)</sup>, Hong Pang<sup>2, \*)</sup>. NEW DATA ON THE GENUS *MELANDRYA* (COLEOPTERA: MALANDRYIDAE) FROM CHINA. – Far Eastern Entomologist. 2016. N 309: 14-20.**

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**Summary.** The specimens of *Melandrya* deposited in the Museum of Biology, Sun Yat–Sen University, Guangzhou, China are examined. *Melandrya* (*Bonzicus*) *coccinea* (Lewis, 1895) is recorded from mainland China for the first time. *M. (B.) incostata* Fairmaire, 1889 and the females of *M. (B.) coccinea* are redescribed and illustrated. A key to the species of *Melandrya* from China is provided.

**Key words:** false darkling beetle, Coleoptera, Melandryidae, *Melandrya*, fauna, key, China.

**Ч. Ф. Цу, Ю. Цяо, Ю. Ли, Х. Панг. Новые сведения о роде *Melandrya* (Coleoptera: Melandryidae) Китая // Дальневосточный энтомолог. 2016. N 309. С. 14-20.**

**Резюме.** Изучены экземпляры рода *Melandrya*, хранящиеся в университете Сун Ят–Сена в Гуанчжоу, Китай. Впервые для фауны континентального Китая указывается *Melandrya* (*Bonzicus*) *coccinea* (Lewis, 1895). Приводятся иллюстрированные переписания *M. (B.) incostata* Fairmaire, 1889 и самки *M. (B.) coccinea*. Дана определительная таблица видов рода *Melandrya* фауны Китая.

## INTRODUCTION

*Melandrya* Fabricius, 1801 is a genus of false darkling beetles (Coleoptera: Melandryidae) with metallic lustrous body or densely covered with long pubescence. The species of this genus are widely distributed in Palaearctic and Nearctic regions. Most Palaearctic species are known from Japan and only seven species have been reported from mainland China (Nikitsky & Pollock, 2008; Gusakov, 2009; Konvička, 2015a, b).

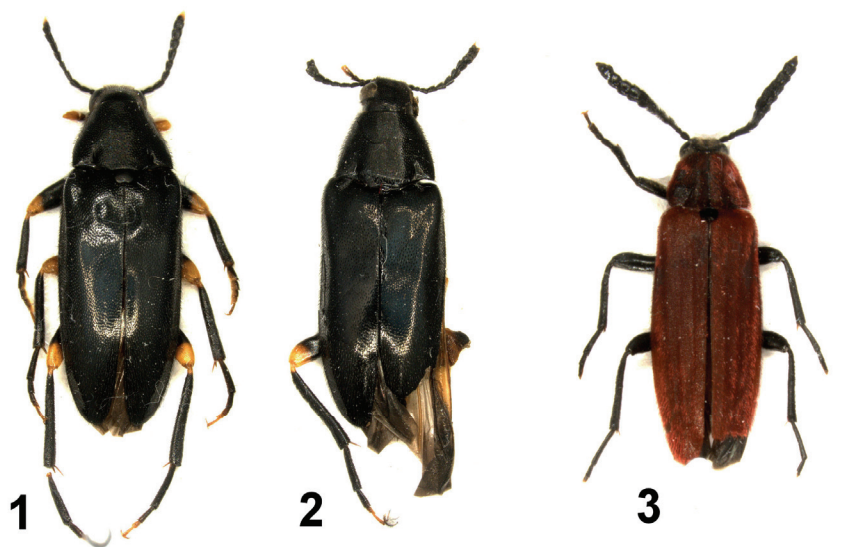
Recently first two authors have had an opportunity to examine the melandryid collection of Museum of Biology, Sun Yat–Sen University, Guangzhou, China and two *Melandrya* species, *M. coccinea* and *M. incostata*, were identified. Here males and females of *M. incostata* and the females of *M. coccinea* are redescribed in detail and illustrated. Key to the species of *Melandrya* from China is provided.

The terminology for morphology used in the descriptions and methods followed that of Konvička (2015b). The genital organs were detached from body and observed using a Nikon

SMZ1270 stereomicroscope, and then glued on a separated card, which was pierced with the same pin as the body parts. Thoracic muscles were detached by tweezers and preserved in a sterilized centrifugal tube with 95% alcohol and kept in freezer at  $-20^{\circ}\text{C}$  for future DNA extraction. The habitus photos were prepared using a Zeiss AxioCam HRc mounted on a Zeiss Discovery V20 microscope. Layers were then aligned and stacked in Zeiss software to obtain a fully sharpened image. Body length is measured from the anterior margin of the clypeus to the apices of elytra and width is measured at the widest part of combined elytra. Absolute measurements were used in millimeters (mm).

The specimens examined are deposited in SYSM (Sun Yat-Sen University, Guangzhou, China).

**RESULTS**  
**Family Melandryidae**  
**Genus *Melandrya* Fabricius, 1801**



Figs. 1–3. Habitus of *Melandrya* spp., dorsal view. 1, 2 – *M. incostata*: 1 – male, 2 – female; 3 – *M. coccinea*, female. Scale bar = 5 mm.

***Melandrya (Bonzicus) incostata* Fairmaire, 1889**

Figs 1–2, 4–9, 13

*Melandrya incostata* Fairmaire, 1889: 46.

*Melandrya (Bonzicus) incostata*: Gusakov, 2009: 6.

*Bonzicus hypocrita* Lewis, 1895: 271; synonymized by Gusakov, 2009: 6.

*Bonzicus hypocrita* var. *notata* Pic, 1934: 28; synonymized by Gusakov, 2009: 6.

**MATERIAL EXAMINED.** **China:** Sichuan Province, Emeishan, Xixinsuo-Jiulinggang, 1600–1800 m, 7–10.VI 2014, 1 ♂, 1 ♀ (Living coll.).



Figs. 4–19. *Melandrya incostata*. 4 – aedeagus, ventral view; 5 – the same, lateral view; 6 – the same, dorsal view; 7 – ovipositor, ventral view; 8 – apical part of ovipositor, ventral view; 9 – the same, dorsal view. Scale bars = 0.5 mm.

REDESCRIPTION. MALE. Body length 11.5 mm; body width 3.6 mm; body length / body width 3.2. Body elongated, parallel-sided in median 1/2, slightly tapered posteriad and anteriad. Head and antennae black, terminal maxillary palpomere and apex of terminal antennomere brightly yellow. Pronotum black. Elytra black, with slightly blue tinge and feebly shining. Legs black, apical portions of femora, basal portions of tibiae brightly yellow, tarsomeres IV and V in fore- and mid-legs; III and IV in hind legs, and claws more or less with yellowish tinge.

Head moderately convex, surface closely punctate, densely covered with erect darkly brown pubescence. Eyes elongate-ovate, slightly emarginate at antennal insertions, interocular distance about 0.5 times as wide as the width of head across eyes. Terminal maxillary palpomere elongate-ovate, about 1.7 times as long as width. Antennae (Fig. 13) slightly clavate, almost reaching basal angles of pronotum; Scape about 1.8 times as long as width, pedicel shortest and narrowest, antennomere III obconical, about 2.4 times as long as pedicel, IV a little longer than III, IV to IX gradually becoming shorter and wider, X subsquare, a little smaller than IX, XI triangular to tapered, about 1.4 times as long as the length of X.

Pronotum approximately trapezoidal, the shorter side 1.7 mm, a little narrower than head; the longer side 3.3 mm, about 1.3 times as wide as length, 1.8 times as wide as head; surface evenly punctate, with pubescence slightly decumbent, roughly as dense as that on head; pronotum depressed near basal margin at the position of lateral 1/4, with a pair of pores at the center of depressed areas.

Scutellum feebly narrowing apicad, with emarginate at apex.

Elytra about 2.1 times as long as width, about 3.0 times as long as pronotal length, widest at basal 1/3, closely and evenly punctate, roughly as that on pronotum; pubescence slightly decumbent, covering the apical 1/3 and lateral 1/4 of elytra.

Abdomen brightly yellow, each ventrite with a pair of black markings close to lateral margins, ventrite V notched at the middle of apex.

Legs slender, entirely punctate and densely covered with decumbent pubescence (except claws); all tibiae fringed with two tibial spurs at apex; the ventral side of front tarsomeres I to IV covered with very dense and erect gold pubescence; ratios of the lengths of tarsal segments from fore to hind legs as follows: 10:5.2:3.7:3.7:7.4; 10:4:2.5:1.5:2.3; 10:2:1.4:2.9, respectively.

Aedeagus (Figs 4–6) elongated, about 3.9 times as long as width. Dorsal plate of parameres trilobed, with setae on dorsum and on the lateral lobes. Median lobe elongated, tapered anteriad.

FEMALE. Very similar to male. Body length 12.0 mm; body width 3.7 mm; body length / body width 3.2.

Ovipositor (Figs 7–9) gradually narrowing from base to apex; paraproct very long, about 2.7 times as long as coxite and about 3.2 times as long as width; proctiger semicircular in dorsal view, tapered posteriorly ventrally.

DISTRIBUTION. Mainland China (Sichuan), Taiwan, Japan.

***Melandrya (Bonzicus) coccinea* (Lewis, 1895)**

Figs 3, 10–12, 14

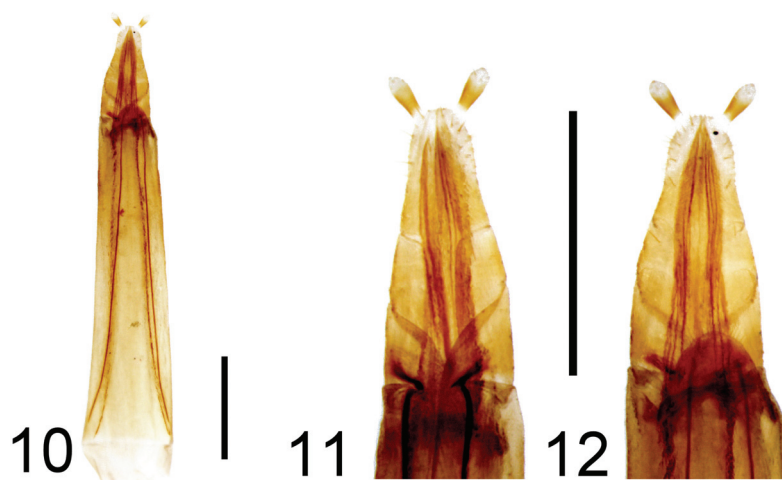
*Ivania coccinea* Lewis, 1895: 271.

*Melandrya (Bonzicus) coccinea*: Gusakov, 2009: 6.

MATERIAL EXAMINED. **China**: Guangxi Province, Cengwanglaoshan, 5–6. V 2012, 3 ♀ (Living coll.).

**REDESCRIPTION. FEMALE.** Body length: 7.5–10.7 mm; body width: 2.1–3.7 mm; body length / body width: 2.9–3.6. Body elongated, narrowed posteriad and anteriorad. Head and antennae black. Pronotum and elytra brown to red, pronotum darker than elytra; scutellum, elytral suture and abdomen black. Legs black, tarsomeres IV and V in fore and mid legs; III and IV in hind legs, and claws more or less with brownish to yellowish tinge.

Head slightly depressed on vertex, surface closely punctated, densely covered with decumbent gold pubescence. Eyes elongated, subparallel-sided, with upper and lower margins rounded, slightly emarginate at antennal insertions. Apical maxillary palpomere elongated, about twice as long as width. Antennae (Fig. 14) flat clavate, exceeding basal angles of pronotum, densely covered with suberect black pubescence; Scape subcylindrical, about 2.4 times as long as width, pedicel shortest and narrowest, antennomere III elongated triangle, about twice as long as pedicel, III–VIII gradually becoming larger, wider and more square-like, IX and X subsquare, a little smaller than VIII, XI triangular to tapered, with slightly yellow tinge at apical 1/2.



Figs. 10–12. *Melandrya coccinea*. 10 – ovipositor, dorsal view; 11 – apical part of ovipositor, ventral view, 12 – the same, dorsal view. Scale bars = 0.5 mm.

Pronotum subtrapezoidal to semicircle, about 0.7 times as long as width, 1.6 times as wide as head, with densely punctate, covered with brightly red and decumbent pubescence; pronotum depressed vertically at middle and lateral 1/3, three depressed areas separated by two conspicuously convex vertical ribs.

Scutellum black, horizontal oval, punctated, with black pubescence.

Elytra about 2.4–2.5 times as long as width, about 4.0 times as long as pronotal length, widest at about 1/2 elytral length, closely and evenly punctated, covered with brightly red and decumbent pubescence; each elytron with four inconspicuously convex ribs.

Abdomen punctated, covered with black decumbent pubescence, ventrite V slightly notched at the middle of apex.

Legs slender, entirely punctated and densely covered with and suberect pubescence (except claws); all tibiae fringed with two tibial spurs at apex; ratios of the lengths of tarsomeres from fore to hind leg as follows: 10:5.8:3.7:3.2:11.6; 10:4.4:2.5:1.9:5.3; 10:3.2:1.5:4, respectively.

Ovipositor (Figs 10–12) gradually narrowing from base to apex; paraproct very long, about 2.8 times as long as coxite and about 3.6 times as long as width; proctiger semicircular in dorsal view, tapered posteriorly ventrally.

DISTRIBUTION. Mainland China, Taiwan, Japan, Russia (Primorskii krai, Sakhalin, Kunashir). Here this species is firstly recorded from mainland China.



Figs. 13–14. Antenna of *Melandrya* spp. 13 – *M. incostata*; 14 – *M. coccinea*. Scale bars = 1 mm.

#### Key to the Chinese species of the genus *Melandrya*

1. Elytra with ribs ..... 2
- Elytra without ribs ..... 5
2. More than 6 ribs on each elytron ..... 3
- Each elytron with 6 or less 6 ribs ..... 4
3. Pronotum subsquare, rounded apically, about as long as width .....  
     ..... *Melandrya (Apteromelandrya) minshanensis* Gusakov, 2005
- Pronotum subtrapezoidal, basal side much longer than apical side and length .....  
     ..... *Melandrya (Melandrya) mongolica* Solsky, 1871
4. Color brightly red ..... *Melandrya (Bonzicus) coccinea* (Lewis, 1895)
- Color dark yellow to brown ..... *Melandrya (Melandrya.) aeneola* Gusakov, 2009
5. Elytra very short, abdomen just a little covered by elytra .....  
     ..... *Melandrya (Apteromelandrya) monstrum* Gusakov, 2009
- Abdomen completely or almost completely covered by elytra ..... 6
6. Elytra covered with gold–white pubescence, forming markings .....  
     ..... *Melandrya (Emmesa) jaromiri* Konvička, 2015
- Elytra without gold–white pubescence ..... 7
7. Apex of all tibiae brightly yellow ..... *Melandrya (Bonzicus) incostata* Fairmaire, 1889
- Color of tibiae evenly brown ..... *Melandrya (Melandrya) gloriosa* Lewis, 1895

NOTES. Li *et. al.* (2015) recorded *Melandrya shimoyamai* Hayashi, 1960 from China, without the explicit label data and deposition of voucher specimens. Therefore, the record of this species from China needs confirmation and herein we not included it in the key.

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